

THE THREE RULES OF LIFE
Remarks of Thomas J. Sugrue
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I. Introduction

Good afternoon and thanks very much for that kind introduction, Paul. It is a pleasure to be here with my friends from the LMCC and to spend some time talking with you.

Let me take a moment to introduce the FCC staff who are here.

Kathleen O'Brien Ham is the Deputy Bureau Chief who is overseeing the work of the Public Safety and Private Wireless Bureau; Herb Zeiler and Jeanne Kowalski, are Deputy Chiefs of the Public Safety and Private Wireless Division; Elizabeth Lyle, is a Special Counsel in the Front Office; and Julie Knapp is from the Office of Engineering Technology.

When I was here last year, I had just started my tenure as Chief of the Bureau, and I devoted much of my LMCC remarks to discussing our grand vision of the future and the efficient way in which we would realize this

vision. This year I thought I would try to follow the example of Abraham Lincoln, who said in his Second Inaugural:

At this second appearing ... there is less occasion for an extended address that there was at the first. Then a statement, somewhat in detail, of a course to be pursued, seemed fitting and proper. Now ... [after] public declarations have been constantly called forth on every point ... little that is new could be presented....

And Lincoln ended with the famous homily, “[w]ith malice toward none; with charity for all ... let us strive to finish the work we are in.”

Well, I do promise not to give a detailed statement of a course to be pursued, although I think there are at least a few new ideas worth discussing. And, in doing so, let us try to keep Lincoln’s admonition about malice and charity in mind. In Washington, in the “spectrum wars” that we are frequently involved in, it seems many parties turn Lincoln’s words on their head – there’s malice toward most, and charity toward very few. But it’s important that we communicate with and among each other openly, express our respective views clearly, but respectfully, and when we disagree do so

constructively. I think that we have tried to do that in the Wireless Bureau and think that LMCC members have had the same approach. I am hopeful and confident that in the coming year we can continue in this manner.

So what I would like to do today is to take stock and focus on a few questions: where have we been in the last year, where are we now, and where are we going.

These are not small questions. In fact, I think if we are going to make such reflective inquiries, it's completely appropriate to turn from one of the great thinkers of the 19th century to one of the great thinkers of the 20th century. I believe the following three rules of life, which have been attributed to Albert Einstein, can provide a roadmap for all of us as we work together on so many important issues:

1. Out of clutter, find simplicity.
2. From discord, find harmony.
3. In the middle of difficulty, lies opportunity.

So I thought I would organize my remarks today around these three themes.

II. Rule One: Out of clutter, find simplicity.

We have gotten rid of a lot of clutter in the last year. As I reported to the Commission last month, we have reduced the number of items pending in the Bureau over a year by 99% -- from approximately 64,000 to approximately 630. We've also greatly improved the speed in which we are disposing of matters: since October 1, 1999, 92% of all applications and other matters processed in the Bureau have been disposed of within 90 days or less of filing.

Simplifying our processes was a key part of our efforts – and to ensuring that we never develop a backlog in the future. We used a unified tracking system in which we inventoried all pending matters in a single, up-to-date automated tracking system. Based on input from licensees and our own internal review, we also initiated several streamlining measures, including use of short-form reconsideration orders and elimination of unnecessary levels of review. One of our biggest simplification measures, of

course, was to put a focused, no-nonsense guy like Jerry Vaughan in charge of the Backlog Reduction Task Force. Those of you who know Jerry, the Deputy Chief of the Bureau, know that he always inspires the staff to new levels of commitment and dedication, as is evidenced here.

I also want to note the work of D'wana Terry, Herb Zeiler, Ramona Melson, Mary Shultz, and others who worked tirelessly to reduce the Public Safety and Private Wireless Division's backlog. This was not a trivial undertaking. PSPWD had to face one of the biggest backlog challenges, as well as keep up with a demanding current workload. But D'wana and her team rose to the occasion, and I want to publicly acknowledge their efforts.

Of course, our work is not done yet. In a dynamic field like radio communications you cannot sit back and rest on your laurels. We are constantly working to improve our processes, and we will be taking some actions shortly that will benefit private land mobile radio (PLMR) licensees. For example, we expect a Commission decision in the near future which will consolidate and streamline the Part 90 rules governing PLMR.

In addition, we will begin deploying our universal licensing service for the PLMR this summer, which will allow you to file electronically and to have access to application information and administrative data online. Some might say we saved the “biggest and baddest” service for last. We process over 150,000 PLMR licenses every year, and we understand the importance of phasing in our ULS system in a coordinated and manageable fashion – and will work closely with coordinators and licensees to ensure that the transition to ULS is a smooth one.

We believe that ULS will simplify your life and provide you with some real benefits. We have “one-stop shopping” which allows you to query one database on the Internet for information on licenses and application status. When you file electronically, ULS loads key information from the license or a prior submission and automatically inserts this data into the application, meaning that users need enter administrative data only once, no matter how many applications they are filing. The system also has online edit checks to notify the user when information is missing or incomplete – which can help prevent dismissal and return of an application. ULS will also accept online credit card payment of application and license

fees – meaning that your application will be ready for processing the next day.

We are confident that ULS will prove beneficial to you and stand ready to help you with any questions or concerns you may have. In addition to our ULS website, we have a ULS technical support number at ((202) 414-1250) and a help e-mail address (ulshelp@fcc.gov). We also welcome any additional suggestions you might have about how we can operate more efficiently. We know that when we get rid of our clutter and simplify our rules, you can operate much more efficiently and focus on your core mission.

III. Rule Two: From discord, find harmony.

Better yet – and I know it's somewhat presumptuous to try to improve upon Albert Einstein -- we would like to find harmony before there is discord.

To do so, though, requires open and honest communication, among all of us. Let me mention at least a couple of areas where we can all work together to promote harmony.

In the near future, probably in June, we plan to hold a forum for all PLMR frequency coordinators. As you know, the rules and licensing environment have changed drastically over the last few years. Prior to 1997, the PLMR frequencies in the bands below 512 MHz were divided into twenty separate radio services – and in most cases, each service had one frequency coordinator who was certified by the Commission. As you know, the refarming proceeding consolidated the twenty radio services into two broad frequency pools, the Public Safety and the Industrial/Business pool. Refarming provided for competition in frequency coordination by generally allowing for the coordination of any Industrial/Business frequency by any of the coordinators of the services that were consolidated into that pool. We believed that introducing competition into the frequency coordination process would result in lower coordination costs and better services to the public. While we think that this approach has been successful, we also think it is a good time – three years after the changeover -- to get together to

discuss in some detail how the process has been working, and exchange information on any possible improvements that could be made.

We would also like to work with you to take a look at interference problems. We are hearing anecdotal stories from public safety officials about how their radios are susceptible to interference from commercial systems and in some cases won't work at all. We need to learn more about this problem, about whether the problems are caused by commercial users operating out of band (as the public safety users generally contend) or the poor quality of some public safety receivers (as the commercial operators often allege), or both.

“Dead zones” are an annoyance and inconvenience for all users, but they are intolerable in the public safety context, where they can be life-threatening. The Commission does have rules on out-of-band emissions by radio transmitters, and those rules could be strengthened or more strictly enforced, if that is the problem. On the other hand, the Commission generally avoids regulating receivers, an approach that in the vast majority of cases makes a lot of sense. However, in his CTIA address this year, Chairman Kennard suggested that equipment manufacturers could adopt

voluntary labeling to give their customers a clear idea of the interference they should expect from different kind of receivers. In the public safety arena, we may want to consider whether we should do even more. For example, for the 700 Mhz band, the Bureau is considering whether to raise the issue of receiver standards specifically in an upcoming rulemaking in conjunction with other issues that have been before the Public Safety National Coordinating Committee (NCC).

IV. Rule Three: In the middle of difficulty, lies opportunity.

This is probably my favorite rule, and the one that I would like to spend the most time discussing. I think we all can agree that the fundamental difficulty that you are facing is what Chairman Kennard has called a “spectrum drought.” As you know, the demand for spectrum has increased dramatically as a result of the explosive growth in wireless communications – and we must do what we can to ensure that everyone’s spectrum needs, including those in the private wireless and public safety communities, are met.

I do believe our efforts to address the drought will provide you with some real opportunities. For example, Commission staff will be convening a forum on May 31 to explore the issue of how the Commission can, if appropriate, facilitate secondary markets for underused spectrum. We all know that there is spectrum out there that is unused or underutilized, and our goal is to allow potential buyers and sellers – or potential lessors and lessees -- to come together, perhaps through a web site that lists both licensees with available spectrum and companies looking to use or acquire it.

The Commission is also exploring other options that could provide new opportunities for you in the future: for example, last month the Commission issued a Notice of Inquiry on the use of software defined radios – or SDRs. In a SDR, functions that were formerly carried out solely in hardware, such as the generation of the transmitted signal and the tuning and detection of the received radio signal, are performed by software that controls high-speed signal processors. Because of the ability to be easily reprogrammed, a SDR can operate over a broad range of frequencies, bandwidths, and transmission standards. In addition to seeking comment on how SDR could result in improved spectrum efficiency and spectrum sharing, the Notice also asked for information about how SDR might

improve “interoperability” among communications systems that currently operate in multiple frequency bands and use different transmission standards, such as those of public safety and emergency agencies.

But let me emphasize that your opportunities are not just in the future: the creation of Guard Band Managers in the 700 Mhz band provides you with an opportunity here and now. As most of you know, last month the Commission issued a *Second Report and Order* in the 700 MHz proceeding, establishing service and auction rules for the 6 MHz of Guard Band spectrum. Licenses in the Guard Bands will be assigned only to Guard Band Managers, a new class of commercial licensees that will be engaged solely in the business of leasing spectrum to third parties on a for-profit basis.

The Guard Band Managers will help to ensure that the public safety licensees in the 700 MHz band operate free from interference from new commercial licensees in the band. Using Guard Band Managers is also an innovative approach to spectrum management which should help develop an active market in spectrum leasing or brokering. The Guard Band Manager will be allowed to subdivide its spectrum in almost any manner it chooses, and make it available to third party users without having to transfer or assign

its license. In addition, we have imposed no restrictions on the type of customers with whom the Guard Managers may seek to do business, and we have imposed only the most minimal restrictions on how Guard Band Managers are required to do business.

Our rules also make clear that we expect Guard Band Managers not to engage in unjust or unreasonable discrimination among spectrum users and to honor all reasonable requests by potential users for access to licensed spectrum. For example, if a trade association served as a Guard Band Manager, it could not discriminate in favor of that trade association's members. Similarly, while we do not impose specific requirements on the number of users that must be required access to their spectrum, we do require that Guard Band Managers lease the predominant amount of their spectrum to non-affiliates.

In addition, our rules also promote competition by limiting an entity and its affiliates to holding only one of the two Guard Band Manager licenses that will be available in a geographic service area. We also prohibit Guard Managers from imposing unduly restrictive requirements on use of its

frequencies, such as restricting users to a particular manufacturer's equipment or a particular technology.

Although the Commission did not limit the end use for which Guard Band Managers may lease their spectrum, it did adopt certain technical and operational rules for the Guard Bands (principally, the restriction on cellular-type architecture and the requirement of frequency coordination with public safety). These rules, as a practical matter, may make the spectrum less viable for use by some types of commercial service providers and more viable for private wireless users and the carriers that serve them. Thus, a possible use of the spectrum is its lease to end users for fixed or mobile private internal communications, or to common or private carriers that will provide fixed or mobile communications services to end users for their private or internal needs.

I urge you to think creatively about how you could benefit from the Guard Band spectrum. Some of you may find that opportunity lies in being a Guard Band Manager; others may find being a lessee best fits your business plans. This is a great opportunity – it is very good spectrum. Although some of the spectrum is currently encumbered by broadcasters

during the transition to digital TV, in most areas, some of the spectrum is available, and in some areas, most or all of the spectrum is available.

The 700 MHz auctions are on a fast track. The auction for the guard band spectrum will begin on June 14, and the short form applications are due May 9. This is a tight deadline, and we realize that it might not provide everyone who would like to participate as much time as they would like to prepare. But we in the Bureau will work with you or your organizations who are interested in competing for Guard Band Manager licenses to provide what information we can on our rules, on the band, or on the auction process itself. Moreover, we will evaluate our experience with the Guard Band Manager licensing in the 700 MHz Guard Bands, and, if appropriate, consider using this type of licensing in other bands in the future.

So I think it's fair to say that the Commission has taken some concrete actions that will allow you to find new opportunity in the middle of our spectrum difficulties. We are also constantly looking for new opportunities to meet your spectrum needs. But I would be less than candid if I did not acknowledge that there are some old difficulties that we must address before

you can fully realize your opportunities. Here are some issues that must be a priority for us in the coming months:

First, we realize the importance of addressing the medical telemetry issues that have prevented the Commission from adopting the LMCC's Low Power Consensus Plan. As most of you know, last year the Commission adopted an NPRM proposing to create a Wireless Medical Telemetry Service, to ensure that no harmful interference occurs that could threaten the operation of life-sensitive bio-medical telemetry operations. The NPRM proposed two possible options for a new home for low power in-hospital telemetry operations: (1) 608-614 MHz, 1395-1400 MHz, and 1429-1432 MHz; and (2) 608-614 MHz and 1391-1400 MHz. Both options involve spectrum that the LMCC has requested in its petition for rulemaking seeking spectrum for the Private Mobile Radio Service. There is also some overlap between these bands and the spectrum identified as being under consideration for a new Land Mobile Communications Service in the Spectrum Policy Statement released in November.

In addition, the Office of Engineering Technology released a Public Notice in October requesting information on medical telemetry equipment in

the 450-460 MHz band. The purpose of the PN is to see if the current freeze can be lifted for this segment of the 450-470 MHz band to provide for an orderly transition without adverse impact to medical telemetry operations.

I am hopeful that the Commission will release a Report and Order resolving the medical telemetry issue in the near future, which will allow us to move forward on the Low Power plan and to have more certainty about what additional bands may be available for the PLMR uses/communications.

Second, I think it is about time to move on the rulemaking implementing the Balanced Budget Act. The Band Manager concept initially was raised in this proceeding, but there are many other issues that we need to resolve to give you the certainty you need to plan for the future. What spectrum must we auction, in light of the Congressional expansion of our auction authority? What steps should we take to avoid mutual exclusivity, which triggers the mandate to use auctions to assign licenses? How should we define the public safety radio services that are specifically exempt from auctions? Reconciling the somewhat conflicting directives of Congress is indeed a difficult task, but we are committed to doing so, and doing so in a way that will provide you with real opportunities.

V. Conclusion

Well, in conclusion, I appreciate the opportunity to talk to you today and to take stock of where we've been, where we are, and where we're going. Working together, I think we have made some real progress, but we all know that much remains to be done. We are committed to that effort, and hope that next year when we meet, we will find that our lives have less clutter, discord, and difficulty, and more simplicity, harmony, and opportunity. Thanks very much.